

CLAIM SUMMARY DOCUMENT

1. (Canceled)
2. (Currently Amended): ~~Brake~~ The brake application system according to Claim 1 ~~20~~, ~~characterized in that~~ wherein, for the electric actuating ~~driving~~ of the one screw connection part ~~(4)~~, an electric drive unit ~~(10)~~ is provided which consists of an electric motor ~~(12)~~ with a gearing ~~(14)~~ arranged on ~~the~~ an output side, the gearing output of the gearing ~~(14)~~ ~~being~~ is rotationally coupled with the ~~electrically-actuated~~ one screw connection part ~~(4)~~.
3. (Currently Amended): ~~Brake~~ The brake application system according to Claim 2, ~~characterized in that~~ wherein the electric motor comprises a d.c. motor ~~(12)~~, and the gearing comprises a planetary gearing ~~(16)~~ axially adjoining the d.c. motor as well as one or more gearwheel stages ~~(18)~~ arranged on its output side.
4. (Currently Amended): ~~Brake~~ The brake application system according to Claim 3 ~~2~~, ~~characterized in that~~ including a clutch ~~(52)~~ ~~is provided which is~~ arranged in front of the electric drive unit ~~(10)~~ of the one screw connection part ~~(4)~~, by means of ~~which~~ the clutch ~~(52)~~, in the event of the presence of an axial force originating from a braking, the one screw connection part ~~(4)~~ is non-rotatably coupled with a non-rotatable part ~~(24)~~ and is otherwise uncoupled from the latter.
5. (Currently Amended): ~~Brake~~ The brake application system according to Claim 4, ~~characterized in that~~ wherein the clutch ~~is formed by~~ includes a cone clutch ~~(52)~~ having at least two conical surfaces ~~(56, 58)~~ which can be stopped as a function of friction against one another and are arranged obliquely viewed in ~~the~~ an effective direction of the axial force.
6. (Currently Amended): ~~Brake~~ The brake application system according to Claim 5, ~~characterized in that~~ wherein one of the conical surfaces ~~(56)~~ is

constructed on a housing (24) and the other conical surface (58) is constructed on a conical sleeve (36) non-rotatably connected with the one screw connection part (4).

7. (Currently Amended): ~~Brake~~ The brake application system according to Claim 6, ~~characterized in that~~ including a threaded pin (50) of the one screw connection part (4) is screwed into an internal thread constructed in a bottom of the conical sleeve (36).

8. (Currently Amended): ~~Brake~~ The brake application system according to Claim 7, ~~characterized in that~~ including a gearwheel (30) meshing with a gearing-output-side gearwheel (28) of ~~the a~~ a gearing (14) ~~is and being~~ coaxially rotatably disposed on a cylindrical projection (34) of the conical sleeve (36).

9. (Currently Amended): ~~Brake~~ The brake application system according to Claim 8, ~~characterized in that~~ including a sliding-slip clutch (38) is arranged between the electric drive unit (10) and the one screw connection part (4), ~~which sliding;~~ and the slip clutch (38) is constructed to be slipping when stop positions have been reached and is otherwise coupling.

10. (Currently Amended): ~~Brake~~ The brake application system according to Claim 9, ~~characterized in that~~ wherein one stop position is formed by the application of the brake pads on the brake disc and another stop position is formed by a screwing end position, in which the one screw connection part (4) is screwed into the other screw connection part (8) to the stop, or vice-versa.

11. (Currently Amended): ~~Brake~~ The brake application system according to Claim 10, ~~characterized in that~~ wherein the sliding-slip clutch (38) is arranged between the cone clutch (52) and the electric drive unit (10) of the one screw connection part (4).

12. (Currently Amended): ~~Brake~~ The brake application system according to Claim 11, ~~characterized in that~~ wherein the sliding-slip clutch (38) contains balls

~~(40)~~ pretensioned by defined spring pressure in grooves, the grooves being constructed on a face of the gearing-output-side gearwheel ~~(28)~~, and the balls ~~(40)~~ being held in bores ~~(42)~~ of a ring ~~(44)~~ non-rotatably held on the cylindrical projection ~~(46)~~ of the conical sleeve ~~(36)~~.

13. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~12~~ 20, ~~characterized in that~~ wherein, at least during the electric actuating driving of the one screw connection part ~~(4)~~ in one rotating direction for the wear adjustment, the other screw connection part ~~(8)~~ is held in a non-rotatable manner.

14. (Currently Amended): ~~Brake~~ The brake application system according to Claim 13, ~~characterized in that~~ wherein the other screw connection part ~~(8)~~ is coupled with an electric drive unit ~~(112)~~ for the emergency and/or auxiliary release by ~~means of an~~ unlockable free wheel ~~(74) which, on the one hand,;~~ the unlockable free wheel permits a rotation of the other screw connection part ~~(8)~~ by ~~means of the~~ electric drive unit ~~(112)~~ in a direction against the wear adjustment and, ~~on the other hand,~~ is constructed for blocking this rotation if it is not caused by the electric drive unit ~~(112)~~.

15. (Currently Amended): ~~Brake~~ The brake application system according to Claim 14, ~~characterized in that~~ wherein another the electric drive unit ~~(10)~~ of the one screw connection part ~~(4)~~ is actuated independently of the electric drive unit ~~(112)~~ of the other screw connection part ~~(8)~~.

16. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~15~~ 14, ~~characterized in that~~ wherein the electric drive unit ~~(112)~~ of the other screw connection part ~~(8)~~ contains an electric motor ~~(114)~~.

17. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~16~~ 14, ~~characterized in that~~ wherein the other screw connection part ~~(8)~~ is coupled by ~~way of a sliding slip clutch (70)~~ with the electric drive unit ~~(112)~~ and has an application surface ~~(68)~~ for the application of a rotating tool.

18. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~17~~ 20, characterized in that the one screw connection part is formed by the threaded spindle (4) and the other screw connection part is formed by the nut (8).

19. (Currently Amended): ~~Brake~~ The brake application system according to Claim 18, ~~characterized in that~~ including the unlockable free wheel is formed as a ~~wrap-coil~~ spring free wheel (74) between a cylindrical wall (100) of a non-rotatable part (26) and a sleeve (72) rotating along with the nut (8).

20. (New): A brake application system for vehicles, particularly for rail vehicles, comprising:

a wear adjuster having a helical gear which has a threaded spindle and a nut which can be screwed thereto as screw connection parts;

one screw connection part of the helical gear being electrically driven for the wear adjusting; and

another screw connection part of the helical gear being electrically driven for an emergency and/or auxiliary release of the brake.